

# Maternal mortality is higher in rural areas, but it doesn't have to be

[usatoday.com/story/sponsor-story/providence/2021/08/25/maternal-mortality-higher-rural-areas-but-doesnt-have/5571288001](https://www.usatoday.com/story/sponsor-story/providence/2021/08/25/maternal-mortality-higher-rural-areas-but-doesnt-have/5571288001)



## Providence aims to reduce maternal mortality rates with key initiatives

Deborah Abrams Kaplan

for Providence



In just over a century, childbirth has become much safer. Since 1915, the maternal mortality rate has decreased dramatically. Back then, six to nine women died from pregnancy-related complications for every 1,000 births. Fast-forward to 1997 when the Centers for Disease Control and Prevention (CDC) recorded only 0.1 maternal death per 1,000 births.

Still, in recent decades, the maternal mortality rate has been rising in the United States – up to .201 per 1,000 live births in 2019. For women who live in rural communities, with populations of less than 50,000, the U.S. Government Accountability Office reports that the rate is even higher – at .238 deaths per 1,000 deaths compared to .146 in larger metropolitan areas.

With almost 20% of the U.S. population living in rural areas, this poses a significant risk to many mothers-to-be – a risk health experts agree must be addressed.

While a rural hospital may have an ICU and emergency department, they don't always have maternal fetal medicine specialists or even obstetricians.

“Unlike a place delivering 3,000 to 6,000 babies a year, smaller rural hospitals don't typically have blood banks and in-house people to handle that at all times,” said Dr. David Lagrew, Executive Medical Director of Women's Services at Providence in Southern California.

“They have to take every best practice protocol and put it within the scope of their capabilities,” Lagrew said.

Without specialists at hand, rural areas can be what's known as an obstetrical desert, so practitioners must be prepared to handle all medical issues and complications. That is because a facility with higher-level care may be too far to travel to in an emergency.

“Women don't want to leave their communities to give birth,” said Dr. John Cullen, a family physician who provides care at Providence Valdez Medical Center in Alaska, and the president-elect of the American Academy of Family Physicians Board of Directors. Cullen's four-doctor Valdez, Alaska, practice delivers 30 to 60 babies a year. For families in Valdez, the next closest hospital with maternity services is 250 miles away, and a hospital offering higher-level maternity care is 300 miles away.

Even with these challenges, their facility has managed to buck the maternity mortality trends and even maintain a lower Cesarean-section rate at 18%, compared to the 31.7% national average reported by the CDC.

## **How Providence is lowering maternal mortality rates**



The Providence system is working to improve maternal health by focusing initiatives on preventing leading causes of maternal death, including heart disease and stroke, as well as hemorrhage and infection.

In addition, Providence is focusing on maternal mental health, as substance abuse and suicide rates rise during the post-partum period, according to the Commonwealth Fund.

“That may not change maternal morbidity and mortality within the four walls of the hospital, but it’s a big contributor toward confounding diagnoses,” Lagrew said.

Additional solutions for rural health systems include:

**Keeping medication available:** Prescribing hypertension medication to prevent stroke and other bad outcomes can be done no matter the hospital location. “We can teach the same protocols, and the same alerts will pop up on our computers,” Lagrew said. However, rural hospitals may not have a pharmacy open 24 hours a day. “In that case, it means preparing to have medications on the floor ready to go if needed,” he added.

**Early screening for blood type:** Rural hospitals must be prepared with the proper blood availability if a pregnant woman is at risk for hemorrhaging. That means at-risk pregnant woman are screened for blood type at the beginning of labor, with blood ordered ahead from

a regional blood center. “That can make it more costly to deliver a baby in a rural hospital than in the inner city,” Lagrew said, but as part of a system like Providence’s, “we have the expertise and resources to do that.”

**Post-partum hemorrhage cart:** Rural hospitals, like the one in Valdez, maintain a cart with supplies in case of a post-partum hemorrhage. There is no time wasted or scrambling for supplies should the woman hemorrhage.

**Simulations:** Doctors and nurses periodically train with simulations to prepare for emergencies, like post-partum hemorrhage, or to relieve shoulder dystocia, when the baby’s shoulder is lodged behind the mother’s pelvis.

**Medical record alerts:** Providence has tools embedded in the hospital admission and practice orders, which helps providers assess the patient’s risk and gives a best practice plan. That may include a list of medications, devices and blood products needed for different situations.

**Artificial intelligence tools:** Providence is rolling out a new platform with artificial intelligence tools embedded in the fetal and maternal monitoring system, which alerts staff to potential issues. It can track a problematic fetal heart rate, provide a warning if a certain stage of labor is taking too long or if there’s an early sign of maternal complication.

**Weekly discussions:** Providence’s rural and urban hospitals participate in weekly reviews of maternity complications and high-risk pregnancies to understand what has or could happen, why and how to prevent issues in the future. “When you regionalize some of these programs, everyone feels they’re part of something bigger,” said Lagrew.

**Monitoring outcomes:** Providence contributes hospital data to a centralized platform with other health care systems, which helps with benchmarking. “For all hospitals, including rural ones, data around outcomes is critical to know,” said Cullen. “If complications are higher in your facility compared to a similar one, you do a deep dive into why.”

## **The Providence difference**

In 2019, the CDC identified 754 women who died of maternal causes. Though Providence delivers 30,000 babies a year across 51 hospitals, the health system experienced only one preventable maternal death in three years. What’s different at Providence? In addition to the preventative initiatives, Providence does not treat maternity care like a standalone service.

“A lot of rural hospitals have service line mentality, breaking down services into discrete silos,” said Cullen. When some health care systems need to cut the budget, they cut maternity care, as it often loses money for the hospital. “Providence looks at care holistically, taking care of both the patient and the entire community.”

As a result of its excellent obstetrical care, more young people are staying in Valdez – and the community, including its schools, are thriving. This has increased the community’s economic engine as well.

“When lots of people are in town, along with young families, the hospital services are more utilized and that impacts the hospital’s bottom line,” Cullen said. With the ability to provide care without a negative impact on their margins, “We’re bucking the trend nationally” he continued, referencing the hospital’s ability to provide care without a negative impact on their margin.

Nationally, 600 rural hospitals are running at a deficit, he added, and 136 rural hospitals have closed since 2010, reports Becker’s. Valdez Medical Center is not-for-profit but is not taking significant support from the city.

Providence believes its initiatives to address maternal health serve as a roadmap to help many more mothers within the rural communities it serves. Still, it will take an even more expansive effort to improve outcomes across the country. “As a nation, we need to invest in rural communities,” Cullen said. “We need to turn this around nationally. We can’t let things continue as they are.”

*Find out more about Providence’s commitment to health for a better world by visiting [providence.org](http://providence.org) today.*

Members of the editorial and news staff of the USA TODAY Network were not involved in the creation of this content.